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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/079,499 | 02/22/2002 | Robert A. Brodersen | SIEB011/02US | 2737 |

22903 7590 07/12/2005

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| EXAMINER |
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VO, TED T

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| ART UNIT | PAPER NUMBER |
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2192

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,499

Applicant(s)

BRODERSEN ET AL.

Examiner

Ted T. Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-77 is/are pending in the application.
- 4a) Of the above claim(s) 62-77 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-48 and 50-61 is/are rejected.
- 7) ☒ Claim(s) 49 is/are objected to.
- 8) ☒ Claim(s) 62-77 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/22/02, 9/27/04.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 7/06/05.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the Preliminary Amendment filed on 02/14/2003.

Claims 1-27 are canceled and Claims 28-77 are new.

Claims 28-77 are pending in the application.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 28-61, are drawn to a claimed invention characterized for merging/updating, classified in class 717, subclass 170.
- II. Claims 62-70, are drawn to a claimed invention characterized for migrating, classified in class 717, subclass 122.
- III. Claims, 71-73, 74-75, are drawn to a claimed invention characterized for displaying, classified in class 717, subclass 113.
- IV. Claims, 76-77, are drawn to a claimed invention characterized for assisting, classified in class 717, subclass 121.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II, III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of the invention I, II, III, and IV are they are operated in the different modes/functions/effects. Group I is for merging/updating; Group II is for migrating; Group III is for displaying, and Group IV is for configuring/assisting.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Lawrenz, Reg. No. 37,376, on 07/05/05, a provisional election was made without traverse to prosecute the invention of group I, claims 28-61. Affirmation of this election must be made by applicant in replying to this Office action. Claims 62-77 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected inventions.

Specification

3. Regarding the specification filed on 02/22/2002, page 1, lines 5-6, it requires amending for updating the information of the U.S Patent Application number 09/377,892, now US Pat. No.6,367,077 B1.

Objections

4. The amendment fails to comply with the title of 37 CFR 1.121 which requires a manner of making an amendment.

Section (h), of title 37 CFR 1.121 requires each section of an amendment document (e.g., amendment to the claims, amendment to the specification, replacement drawings and remarks) must begin on a separate sheet. It requires all future amendments appeared as in the manner of section (h).

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. The claims 28-30 and 58-61 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.

As per Claims 28-30: Claims recite a method of upgrading a software application in which the claimed preamble and the steps of the Claims fail to be as the method embodied in a hardware system like a computer. Such claims fail to meet 101 statutory claims as "useful, concrete and tangible result" (State Street, 149 F.3d at 1373, 47).

The preamble and steps in claims 28-30 covers an manual act such that the claims could be performed by using papers and pens. Fail to make the claims tangibly embodied, the claims will be a mere abstract idea, and thus rejected under 35 USC 101.

As per Claims 58-61: Claims 58-61 are also identified as not to be tangible method since the steps of Claims can be performed by using paper and pen. The Claims are also rejected in the same rationale as set forth in addressing to Claims 28-30 above.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of application amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 28-48, 50-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Munch, "Versioning in a Software Engineering Database – the Change Oriented Way", 1993.

The whole reference would be referred. Given the broadest reasonable interpretation of followed claims in light of the specification.

As per Claim 28: Munch discloses versioning including creating a new version from merging the differences between to modified versions:

The teaching covers the limitations:

A method of upgrading a software application by merging two modified versions of a common ancestor version, the method comprising:

receiving indications of a first modified version of the common ancestor version and of a distinct second modified version of the common ancestor version, the first modified version including multiple user customizations (See sec. 3.2.3: Merging); and

without user intervention, automatically creating a new upgrade version of the software application by merging the first and second modified versions, by identifying user customizations in the first modified version that are not present in the second modified version (See whole sec. 3.2: and whole sec. 3.3. Particularly, see Figure 3.1);

determining which of the identified user customizations are compatible with the second modified version (See whole sec. 3.2: and whole section 3.3, and see further sec. 9.6.3 Improved Diff Processing, started within page 217); and

creating the upgrade version of the software application by merging the compatible user customizations with the second modified version (Refer to the main purpose of this reference. E.G. see sec. 3.2.3. Further see sec. 4.3.3).

As per Claim 29: Munch further discloses *The method of claim 28 wherein the identifying of the user customizations in the first modified version that are not present in the second modified version includes comparing objects resident in the first and second modified versions* (See sec. 4.9.3. For example, "we means that two different changes to the same object": *customizations, comparing*).

As per Claim 30: Munch further discloses, *The method of claim 28, further comprising:*

determining identified user customizations that conflict with the second modified version (See sec. 2.2.11: e.g. "detecting and dealing with such conflict");

automatically notifying a user of the conflicting user customizations (See sec 2.2.2, (b) change recording, sec. 2.2.11, discuss problems arise when two developers want to make changes to the same part, see sec. 4.2.3, 4.2.4, and 4.2.5, describes to let a user know the changes; sec. 8.4: describes the cooperating works"); and

presenting options to the user for resolving the conflicting user customizations (Se sec. 8.4: such as merge, lock, etc).

As per Claim 31: Munch further discloses, *A computer-implemented method of creating a new version of a software application by merging a first modified version of a software application and a second modified version of the software application, the method comprising:*

automatically determining a set of differences between the first modified version and the second modified version (See sec. 3.2.1 'change', sec. 4.5.2, sec. 9.6.4);

automatically determining which differences in the determined set are compatible differences (See sec. 3.2.6, Change Sets, sec. 9.6.4, 'delta'); and

creating a new version of the software application by modifying the second modified version to include the compatible differences (See sec. 3.2.1, 3.3.1, 'new version', sec. 4.9.3, 'create a new version by merging two changes').

As per Claim 32: Munch further discloses, *The method of claim 31 including automatically determining differences in the determined set that are conflicting differences (See sec. 2.2.11, sec 5.6.2).*

As per Claim 33: Munch further discloses, *The method of claim 32 including automatically resolving one or more of the conflicting differences without user intervention based at least in part on predefined conflict resolution rules, and wherein the automatic determining of the compatible differences includes selecting the resolved conflicting differences (See sec. 2.2.6.2, 2.2.11, sec. 5.2.3, sec 5.6.2).*

As per Claim 34: Munch further discloses, *The method of claim 32 including notifying a user of at least some of the conflicting differences (See sec 2.2.2, (b) change recording, sec. 2.2.11, discuss problems arise when two developers want to make changes to the same part, see sec. 4.2.3, 4.2.4, and 4.2.5, describes to let a user know the changes; sec. 8.4: describes the cooperating works").*

As per Claim 35: Munch further discloses, *The method of claim 34 including presenting options to the user for resolving at least some of the conflicting differences of which the user was notified and resolving one or more of the conflicting differences in a manner based on one or more of the presented options selected by the user (See sec 3.3.1, sec. 3.3.2, sec, 4.2.2, choice, sec. 8.4: such as merge, lock, etc).*

As per Claim 36: Munch further discloses, *The method of claim 34 including determining an importance of each of one or more of the conflicting differences, and wherein the notifying of the user of conflicting differences includes providing notification of the determined importance's (See whole reference, particularly see sec. 4.2.2, version choice).*

As per Claim 37: Munch further discloses, *The method of claim 32 wherein the first and second modified versions include one or more common objects, and wherein the conflicting differences include a difference in attributes of one of the common objects between the first and second modified versions (See modified versions by referring to the purpose of this whole reference, and further see, sec. 2.2.1, Some Basis Definition: discussing Software Object, where this modified version discussed in this reference includes software object, and each object includes attributes).*

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As per Claim 38: Munch further discloses, *The method of claim 32 wherein the first and second modified versions each include objects, and wherein the conflicting differences include a difference in the objects present in the first and second modified versions. See sec. 2.3.4, 2.3.5, 2.3.6, and see section 3.1.1 Defining Versioning).*

As per Claim 39: Munch further discloses, *The method of claim 31 wherein the differences determined to be compatible include conflicting differences that are identified as superficial (See reference that discusses "change" and "conflict" as given in above As per claims).*

As per Claim 40: Munch further discloses, *The method of claim 31 wherein the differences determined to be compatible include conflicting differences corresponding to objects that are not identified as being of high priority (See reference that discusses "identification" and also see sec. 2.2.5).*

As per Claim 41: Munch further discloses, *The method of claim 31 including, before the automatic determining of the set of differences, displaying to a user a graphical user interface related to creating a new version of the software application, and wherein the automatic determining of the set of differences is in response to an indication from the user via the graphical user interface (See sec. Sec. 3.4.5, 4.2.1, Option).*

As per Claim 42: Munch further discloses, *The method of claim 41 wherein the displaying of the graphical user interface to the user includes displaying an option to include differences between the first and second modified versions in the determined set only if the differences correspond to high priority aspects of the first and second modified versions and/or displaying an option to abort creating a new version if a specified number of errors is exceeded (See sec. 4.2.1, Option, and sec. 4.2.4, Visibility).*

As per Claim 43: Munch further discloses, *The method of claim 41 wherein the first and second modified versions of the software application have a common ancestor version of the software application, wherein one of the modified versions has been customized by a user so as to delete one or more aspects of the common ancestor version, wherein the aspects of the common ancestor version deleted in the one modified version have not been deleted in the other modified version, and including displaying an option to the user to select the deleted aspects as being a compatible difference such that the created new version does not include the deleted aspects (See sec. 3.3.1).*

As per Claim 44: Munch further discloses, *The method of claim 31 including displaying to a user at least some of the differences of the determined set so as to allow visual comparison of those two versions.*

(See sec. 4.2.4, Visibility).

As per Claim 45: Munch further discloses, *The method of claim 31 wherein at least one of the modified versions includes modifications made by a user and/or at least one of the modified versions includes modifications made by a developer of the software application* (See sec. 3.2.1, Revisions).

As per Claim 46: Munch further discloses, *The method of claim 31 wherein the automatic determining of the set of differences is further between the first and second modified versions and a common ancestor version* (See sec. 5.5.1 and 5.5.2, Parent/Child Propagation).

As per Claim 47: Munch further discloses, *The method of claim 31 wherein the first modified version includes user modifications to a prior version of the software application, wherein the second modified version is an upgrade for that prior version, and wherein the creating of the new version is to upgrade the software application to a version of the upgrade that includes at least some of the user modifications* (See sec. 3.2.1, Revisions).

As per Claim 48: Munch further discloses, *The method of claim 47 wherein the automatic determining of the set of differences and the automatic determining of the compatible differences comprises:*

determining a first set of differences based on a comparison of the user-modified prior version and the prior version;

determining a second set of differences based on a comparison of the upgrade version and the prior version; and

determining which differences from the first set are compatible with the second set of differences.

See whole sec. 2.2.6 Change Control that includes Recording, Processing.

As per Claim 50: Munch further discloses, *The method of claim 47 wherein the user-modified prior version comprises a first plurality of objects, the prior version comprises a second plurality of objects, and the upgrade version comprises a third plurality of objects, and wherein the determining of the set of differences comprises determining that an object from the first plurality of objects is not included within the second or third plurality of objects and indicating that that object is a compatible difference.* (See sec.

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3.2.3, Merging, where *first plurality of objects* is referred one variant, a *second plurality of objects* is referred another variant, and *upgrade version* is referred merged version).

As per Claim 51: Munch further discloses, *The method of claim 47 wherein the user-modified prior version comprises a first plurality of objects, the prior version comprises a second plurality of objects, and the upgrade version comprises a third plurality of objects, and wherein the determining of the set of differences comprises determining that an object from the second and third plurality of objects is not included within the first plurality of objects and indicating that absence of that object from the first plurality of objects is a conflicting difference* (See sec. 3.2.3, Merging, where *first plurality of objects* is referred one variant, a *second plurality of objects* is referred another variant, and *upgrade version* is referred merged version; and further see See sec. 2.3.4, 2.3.5, 2.3.6, and see section 3.1.1 Defining Versioning).

As per Claim 52: Claim 52 is a readable medium claim that has the claim functionality corresponding to Claim 31, a computer-implemented method claim. Claim 52 has the same rejection as set forth in Claim 31. See rationale addressed in Claim 31 above.

As per Claim 53: Claim 53 is further limitation of the readable medium claim 52, where Claim 53 has the claim functionality corresponding to the computer-implemented method Claim 37. Claim 53 has the same rejection as set forth in Claim 37. See rationale addressed in Claim 37 above.

As per Claim 54: Claim 54 is further limitation of the readable medium claim 52, where Claim 54 has the claim functionality corresponding to the computer-implemented method Claim 41. Claim 54 has the same rejection as set forth in Claim 41. See rationale addressed in Claim 41 above.

As per Claim 55: Claim 55 remains having limitation of the readable medium claim 52, where Claim 52 has the claim functionality remained within Claim 31. Claim 55 has the same rejection as set forth in Claim 31. See rationale addressed in Claim 31 above.

As per Claim 56: Claim 56 is an apparatus claim that has the claim functionality corresponding to Claim 31, a computer-implemented method claim. Claim 56 has the same rejection as set forth in Claim 31. See rationale addressed in Claim 31 above.

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As per Claim 57: Claim 56 is a computing device claim that has the claim functionality corresponding to Claim 31, a computer-implemented method claim. Claim 57 has the same rejection as set forth in Claim 31. See rationale addressed in Claim 31 above.

As per Claim 58: Claim 58 is a method claim that has the claim functionality corresponding to Claim 31, a computer-implemented method claim. Claim 58 has the same rejection as set forth in Claim 31. See rationale addressed in Claim 31 above.

As per Claim 59: Claim 59 is further limitation of the method claim 58, where Claim 59 has the claim functionality corresponding to the computer-implemented method Claim 43. Claim 59 has the same rejection as set forth in Claim 43. See rationale addressed in Claim 43 above.

As per Claim 60: Claim 60 is further limitation of the method claim 58, where Claim 60 has the claim functionality corresponding to the computer-implemented method Claim 48. Claim 60 has the same rejection as set forth in Claim 48. See rationale addressed in Claim 48 above.

As per Claim 61: Claim 61 is further limitation of the method claim 58, where Claim 61 has the claim functionality corresponding to the computer-implemented method Claims 43 and Claim 48. Claim 60 has the same rejection as set forth in Claims 43 and 48. See rationale addressed in Claim 43 and Claim 48 above.

Allowable Subject Matter

9. Claim 49 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reference fails to address the claimed functionality as recited in claim 49.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3694.

The Central Facsimile for the organization where this application or proceeding is assigned is 703-872-9306. On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300. Faxes sent to the old number will be routed to the new number until September 15, 2005. After September 15, 2005, the old number will no longer be in service and 571-273-8300 will be the only facsimile number recognized for "centralized delivery."

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ted T. Vo
Primary Examiner
Art Unit 2192
July 06, 2005